



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,699	08/22/2001	Satoru Okamoto	SEL 273	9139

7590 01/16/2007  
COOK, ALEX, MCFARRON, MANZO  
CUMMINGS & MEHLER, LTD.  
Suite 2850  
200 West Adams St.  
Chicago, IL 60606

EXAMINER
----------

DUONG, THOI V

ART UNIT	PAPER NUMBER
----------	--------------

2871

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/934,699

Applicant(s)

OKAMOTO ET AL.

Examiner

Thoi V. Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 16-19, 21-27 and 34-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 16-19, 21-27 and 34-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments in the Pre-Appeal Brief filed September 25, 2006, with respect to the rejection(s) of claim(s) 1 and 2 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the final rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Minami et al. (US 6,967,632).
2. Claims 12-15, 20 and 28-33 were cancelled, and claims 1-11, 16-19, 21-27 and 34-51 are currently are pending in this application.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minami et al. (Minami, US 6,967,632 B1).

Re claim 24, as shown in Figs. 1-7, Minami discloses an electronic device comprising:

a liquid crystal display panel 2 (col. 3, lines 49-59 and col. 12, lines 26-34); and  
an active matrix EL display panel 4 (col. 3, lines 49-59 and col. 12, lines 26-34),

wherein the liquid crystal display panel 2 and the active matrix EL display panel are attached to each other so as to allow opening and closing (col. 4, lines 47-55).

It is obvious that a portable electronic device such as mobile telephone handset using liquid crystal display for lower power consumption is well known in the art.

Re claim 26, Minami discloses that the active matrix EL display panel 4 displays an image (col. 3, lines 49-59 and col. 12, lines 31-34).

5. Claims 1, 2, 4-11, 21, 22, 25, 27, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minami et al. (Minami, US 6,967,632) in view of Priestman et al. (Priestman, USPN 6,812,954 B1).

Re claims 1 and 2, as shown in Figs. 1-7, Minami discloses an electronic device comprising:

a cover member comprising a first display panel 4 for displaying an image; and  
a second display panel 2,

wherein the cover member comprising the first display panel 4 and the second display panel 2 are attached to each other in a longitudinal direction or in a lateral direction so as to allow opening and closing (col. 4, lines 47-55 and col. 12, lines 21-25),

wherein the second display panel 2 is an active matrix display (col. 3, lines 49-59), and

wherein the first display panel 4 is an EL display panel and the second display panel 2 is a liquid crystal display panel (col. 12, lines 26-34).

However, Minami does not suggest that the second display panel comprising a touch input operation as recited in claims 1, 2 and 25.

As shown in Fig. 4, Priestman discloses a mobile videophone 200 (portable electronic device) comprising a first display panel 226 and a second display panel 220

Art Unit: 2871

comprising a touch input operation which is used to control the basic operation of the videophone as well as being able to display video images received (col. 5, lines 17-22 and col. 8, lines 1-9 and 65-66).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the electronic device of Minami by employing a touch input operation for the second display panel as taught by Priestman in order to allow the user to input commands and raw data (col. 5, lines 17-22).

It is also obvious that a portable electronic device such as mobile telephone handset using liquid crystal display for lower power consumption is well known in the art.

Re claims 4 and 5, Priestman discloses that the first display panel 226 comprises a touch input operation portion (col. 8, lines 65-66).

Re claims 6 and 7, Priestman discloses that the second display panel 220 displays one of a character, a symbol, and buttons (col. 8, line 66 through col. 9, line 5).

Re claims 8, 9 and 27, Priestman discloses that the second display panel 220 comprises an image pickup device 222 (CCD video camera).

Re claims 10 and 11, Priestman discloses that one of the first display device and the second display device comprises a system 222 for identifying a user (col. 8, lines 54-64).

Re claims 21 and 22, Priestman discloses that the portable electronic device comprises audio portions 224, 228 as a communication function (col. 9, lines 18-30).

Art Unit: 2871

6. Claims 3 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minami et al. (Minami, US 6,967,632) in view of Priestman et al. (Priestman, USPN 6,812,954 B1) as applied to claims 1, 2, 4-11, 21, 22, 25, 27, 34 and 35 above and further in view of Mack II et al. (USPN 6,510,325 B1).

The electronic device of Minami as modified in view of Priestman above includes all that is recited in claims 3 and 16-18 except for a third display device comprising an image pickup device and a system for identifying a user.

Re claim 3, as shown in Figs. 2D, 3A and 3B, Mack II et al. discloses a portable electronic device comprising:

- a first display panel 6 in front of an upper segment 9 (Fig. 3A);

- a second display panel 43 (touch pad) in a base segment 8; and

- a third display panel 20 provided between the first display device 6 and the second display device 43 (in back of the upper segment 9 in Fig. 3B),

wherein, re claims 16 and 17, the third display panel comprises an image pickup device 21 or a system for identifying a user 21 (col. 6, lines 49-52); and

wherein, re claim 18, the third display panel is a liquid crystal display device (col. 6, lines 34-52).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the device of Priestman with the teaching of Mack II et al. by forming a third display device comprising an image pickup device or a system for identifying a user so as to obtain a full function video phone (col. 6, lines 43-52).

7. Claims 19 and 23 are rejected under 35 U.S.C. 102(b) being unpatentable by Minami et al. (Minami, US 6,967,632) in view of Priestman et al. (Priestman, USPN 6,812,954 B1) and Gale et al. (Gale, USPN 6,452,577 B1).

Re claim 19, as shown in Figs. 1-7, Minami discloses an electronic device comprising:

a cover member comprising an active matrix EL display panel 4 for displaying an image (col. 3, lines 49-59 and col. 12, lines 31-34); and

a display panel 2 (col. 3, lines 49-59),

wherein the cover member and the display panel 2 are attached to each other so as to allow opening and closing (col. 4, lines 47-55).

Minami discloses an electronic device that is basically the same as that recited in claim 19 except for the display panel being a reflection display panel comprising a touch input operation, wherein the reflection display is made to display by irradiating light emitted from the active matrix EL display device.

At first, as shown in Figs. 1 and 2, Gale discloses a portable electronic device (col. 1, lines 12-23) comprising:

a cover member 12 comprising an active matrix display panel 22 (microdisplay) for displaying an image (col. 3, lines 1-20); and

a reflection display panel 18, the reflection display is made to display by irradiating light emitted from the active matrix display panel 22.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the electronic device of Minami with the teaching

of Gale by having a reflection display panel where the reflection display is made to display by irradiating light emitted from the active matrix EL display device onto the reflection display to produce an image which is viewable by a user at a greater distance (col. 1, lines 26-31).

Further, as shown in Fig. 4, Priestman discloses a mobile videophone 200 (portable electronic device) comprising a first display panel 226 and a second display panel 220 comprising a touch input operation which is used to control the basic operation of the videophone as well as being able to display video images received (col. 5, lines 17-22 and col. 8, lines 1-9 and 65-66).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the electronic device of Minami by employing a touch input operation for the reflective display panel as taught by Priestman in order to allow the user to input commands and raw data (col. 5, lines 17-22).

It is also obvious that a portable electronic device such as mobile telephone handset using liquid crystal display for lower power consumption is well known in the art.

Re claim 23, Priestman discloses that the portable electronic device comprises a communication function 224, 228.

8. Claims 36-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minami et al. (Minami, US 6,967,632) in view of Nakai et al. (Nakai, US 6,072,454) and Priestman et al. (Priestman, USPN 6,812,954 B1).



Re claims 36 and 44, as shown in Figs. 1-7, Minami discloses an electronic device comprising:

a first liquid crystal display device 2 for displaying an image (col. 3, lines 49-59);  
and

a second liquid crystal display device 4 (col. 3, lines 49-59),  
wherein the first display device 2 and the second display device 4 are attached to each other;

wherein the first display device 2 is an active matrix liquid crystal display device (col. 3, lines 49-59);

wherein the second display device 4 is one of an active matrix display device and an active matrix EL display device (col. 3, lines 49-49 and col. 12, lines 31-34); and

wherein the first display device 2 has a higher resolution than that of the second display device 4 (col. 3, lines 49-59).

However, Minami does not disclose that the second display device comprising a touch input operation and the first display device or the second display device includes a top gate TFT or an inverse stagger TFT (bottom gate).

At first, according to an intended application, it is well known in the art that the TFT structure may be a top gate (staggered type) or an inverse staggered type (bottom gate) as disclosed by Nakai (col. 17, lines 35-41).

Further, as shown in Fig. 4, Priestman discloses a mobile videophone 200 (portable electronic device) comprising a first display panel 226 and a second display panel 220 comprising a touch input operation which is used to control the basic

Art Unit: 2871

operation of the videophone as well as being able to display video images received (col. 5, lines 17-22 and col. 8, lines 1-9 and 65-66).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the electronic device of Minami by employing a touch input operation for the reflective display panel as taught by Priestman in order to allow the user to input commands and raw data (col. 5, lines 17-22).

It is also obvious that a portable electronic device such as mobile telephone handset using liquid crystal display for lower power consumption is well known in the art.

Re claims 39 and 47, Priestman discloses that the second display panel 220 displays one of a character, a symbol, and buttons (col. 8, line 66 through col. 9, line 5);

Re claims 40 and 48, Priestman discloses that the portable electronic device comprises audio portions 224, 228 as a communication function (col. 9, lines 18-30);

Re claims 41 and 49, Priestman discloses that a screen of the second display device 220 is switched to various input keys displayed on the display device since the display device can be used as a man machine interface (col. 8, line 66 through col. 9, line 5).

Re claims 43 and 51, Priestman discloses that the portable electronic device is a mobile telephone as shown in Fig. 4.

Art Unit: 2871

Re claims 37, 38, 45 and 46, Nakai discloses that the TFT may be formed of a semiconductor layer of polysilicon or a semiconductor layer of amorphous silicon is used (col. 17, lines 35-41).

Re claims 42 and 50, Nakai discloses that TFT 407 is formed a pixel portion or a driver circuit or a memory or a microprocessor on a substrate 401 (see also Fig. 1 and col. 15, lines 26-62).

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms, can be reached at (571) 272-1787.

Thoi V. Duong



01/06/2007